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By Luther Tucker & Co.
EDITORS AND PUBLISHERS.

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THE GENESEE FARMER.

SATURDAY, FEBRUARY 22, 1834.

Cutting Hay for Horses.

Our readers may recollect that we published two or three articles last summer, showing the great advantage which resulted from cutting hay for horses, to the animal, and to the owner in the economy of food, in the practice of Great Britain. We observe by the last New-York Farmer, that the experiment has also been successfully made in this country, in two of the most extensive horse establishments, that of Mr. Reeside, at Philadelphia, and that of Mr. Bloodgood, at New-York. We copy the result of Mr. Bloodgood's experiment from the Farmer:

"In six months of 1831, when the hay was not cut, the following quantities were bought for the consumption of 20 horses:

"January, 4,480 pounds; February, 10,304; March, 2,240; April, 15,680; May, 6,200; June, 5,000. Total, 43,904 pounds.

"In six months of 1833—January, 4,000 pounds; February, 5,000; March, 5,300; April, 2,000; May, 7,000; June, 5,000. Total, 28,000 pounds.

"One bushel of cut hay is given three times a day, with 4 quarts of ship stuff, and 2 quarts of Indian meal, at each feeding. Oats are sometimes given once a day instead of the hay and meal. Under this feeding, which may be considered pretty high, the horses, though they labor hard, are kept in much better condition than when long hay and oats were given. The present plan of feeding is considered to be a saving in expense at least one third."

In connection with the above, we publish the following letter, which we find in the New England Farmer:

Beverly, Jan. 25, 1834.

MR. J. R. NEWELL,—*Dear Sir*—It is with pleasure that I comply with your request, asking the result of my experience on the subject of feeding stock. My stock consists of 51 head, viz: 8 horses, 6 oxen, 35 cows and 2 yearlings. This stock was fed in the usual way with English, salt and fresh meadow hay, with meal and potatoes, as their condition required, to the 1st of December last, at which time I commenced chopping my hay. In giving the result of my experiment, I must in some measure ask the privilege of a Yankee, viz. that of guessing; but in this case I think I can guess pretty correctly, as much of the hay has been loaded in consequence of having to remove it from one barn to the other, and calculating the number of days a load would last, the result is as follows:

700 lbs. English hay, at $16 per ton,	$5,60
200 do. fresh...do.....4...do.....	40
100 do. salt....do.....8...do.....	40
3 bushels corn meal,	2,25
8...do...long red potatoes,	1,60
Per day,	$10,25
400 lbs. English hay chopped, $16 per ton,	3,20
100 do. fresh...do....do.....4...do.....	20
100 do. salt....do....do.....8...do.....	40
3 bushels corn meal,	2,25
4...do...long red potatoes chopped,	80
140 gallons pure water,	0,00
1 man at $8 per month,	31
Board of man at $1,50 per week,	23
Per day,	$7,39

Balance in favor of Straw Cutter, $2,86 per day.

In addition to the above balance may be added an increase of six gallons of milk from twenty-five cows then in milk, and likewise something for the improvement of the condition of my whole stock. Yours, respectfully,

AMOS SHELDEN.

Potato Balls.

A lady of our acquaintance recommends the following preparation:

"Mix mashed potatoes with the yolk of an egg—roll them into balls—flour them—or egg and bread crum them—and fry them in clear drippings [or lard],—or brown them in a Dutch oven.',

Chimistry in the Kitchen.

Why is it necessary to mix lime with ashes, which we are about to leach to obtain lye to make soap? The correct answer to this question will explain the reason why our good housewives do not always succeed in making good soap, and will suggest a remedy for the evil. Common soap is a compound, chimically united, of potash, or alkali, and grease, fat or tallow. The alkali is naturally combined with carbonic acid, for which it has a stronger affinity than it has for grease; hence while it continues united with the acid, it will not unite with the grease and produce good soap. But lime having a stronger affinity for the acid than the alkali has, extracts it from the ley, and the alkali then readily unites with the grease, and forms soap. From this it will be seen, that the lime should be fresh burnt, and spread over the bottom of the leach tub, so that the lye all filters through it.

Economy of Fuel.

We have examined with interest, a small work, detailing "*Experiments to determine the comparative quantity of heat evolved in the combustion of the principal varieties of wood and coal, used in the United States, for fuel; and also to determine the comparative quantity of heat lost by the ordinary apparatus made use of by their combustion.* BY MARCUS BULL." The experiments seem to have been made with great accuracy, and the results afford a matter of interest to every householder.

Mr. Bull has ascertained the cost of fuel used in Philadelphia in a given year, to be $80,043, which being divided among the population, gives $7,04, as the average cost of fuel to each inhabitant, supposing the consumption to be equal. Adopting this estimate as a fair average for the population within ten miles of tide water, in the Atlantic states, from Maine to Georgia, it gives an aggregate of twenty-one millions of dollars as the annual cost of fuel for this portion of population, which is estimated to amount to three millions of souls. Estimating the cost to the remaining eight millions and a half of our population, at half the above price, or $3,50 to each individual, he gives us an aggregate of about fifty one millions of dollars as the total annual expense of fuel, for every purpose, in the United States.

The economy of fuel is to be studied,—first, in the kind to be selected for use; 2d. in its quality and preparation for use; and 3d. in the choice of the apparatus in which it is to be used.

In regard to wood. The quantity of heat evolved by a cubic foot of the several kinds, when in a perfectly dry state, is very nearly in the ratio of their specific gravity, or relative weight; as for example, the specific gravity of shell bark hickory being 1.000, a cord weighs 4469 lbs.; by the same scale, the specific gravity of white pine is .476, and the cord weighs only 1868 lbs. The quantity of heat evolved by a pound of white pine is as great as that evolved by a pound of hickory. The difference in value arises from the great disparity in weight—the hickory weighing as 22, and the pine as 9—and their relative value being—hickory 100, white pine 42—or the first being considerably more than twice as valuable as the latter. The table which we shall append will exhibit the relative value of the different kinds of fuel in common use.

Charcoal forms a considerable item of fuel; and the facts which Mr. Bull has given us upon the subject will be found to be new and interesting. The value of charcoal, like that of wood, is principally to be determined by its weight—a pound from one kind of wood affording about as much heat as a pound from another kind. The quantity, or rather weight, of charcoal, afforded by the different kinds of wood, is nearly in proportion to the relative weight of the wood. Thus hickory produces 26.22, the specific gravity of the dry coal being .625; while the white pine produces 24.35, and the specific gravity of the dry coal being only .298. Thus, whether burnt in the form of wood or of charcoal, a cord of hickory affords more than twice the heat that is found in a cord of white pine. The quality of charcoal, however, depends much upon the manner in which it is prepared. The more completely the atmospheric air is excluded from the wood, while under the process of being charred, and the more heat that is given to it, the *heavier*, the *harder* and the *better* will be the product. The best charcoal will be found of a slate color on its surface, dense, sonorous and brittle; while inferior qualities approach to a jet black, and are soft and powdery upon the exterior. To obtain the best quality, Mr. Bull recommends that the wood be piled in a single tier, that charcoal dust be interposed between the wood, that the pile be covered with clay, and then a layer of sand, to close the cracks which the fire may cause in the clay, and that the fire be communicated at the exterior base. An intelligent collier, who partially adopted Mr. Bull's recommendation, gained by it 10 per cent. in quantity, by measure; and Mr. B. found the coal nearly 20 per cent. heavier than usual. If these facts are correct, and we have no reason to doubt them, it would be an excellent police regulation in our towns, to have charcoal sold by weight, instead of by measure.

The loss in weight which wood undergoes in drying, and the moisture which it absorbs, by exposure, after it has become dry, are matters of

considerable interest to the farmer, and the consumer. Hickory wood taken green, and made absolutely dry, experienced a diminution of weight of 37½ per cent., white oak 40 per cent., and soft maple 48 per cent., or very near one half. Both wood and charcoal, after being made perfectly dry, absorbed in twelve months, under cover, from 8 to 12 per cent. of moisture.

If we assume, says Mr. Bull, the mean quantity of moisture in the woods, when green, at 42 per cent., the great disadvantage of attempting to burn wood in this state, (or to transport it to a distance) must be obvious, as in every 100 lbs. of this compound of wood and water, 42 lbs. of aqueous matter must be expelled from the wood; and as the capacity of water for absorbing heat is as 4 to 1, when compared to air, and probably greater during its conversion into vapor, which must be effected before it can escape, the loss of heat must consequently be great.

Common names of woods and coals.	Specific gravity of dry wood.	Avoirdupois of dry wood in a cord.	Product of charcoal from 100 parts of dry wood by weight.	Specific gravity of dry coal.	Pounds of dry coal in 1 bush.	Lbs. of charcoal from 1 cord of dry wood.	Bush. of charcoal from one cord of dry wood.
White Ash	,772	35.50	24.74	,547	28.76	886	31
White Beach	,724	32.36	19.62	,518	27.26	635	23
Black Birch	,697	32.36	19.62	,428	22.52	604	27
Chestnut	,522	23.33	25.29	,379	19.94	590	30
White Elm	,580	25.92	24.85	,357	18.79	644	34
Shell Bark Hickory	1,000	44.69	26.22	,625	32.89	1172	36
Pig Nut Hickory	,949	42.41	25.22	,639	33.52	1070	32
Red Heart Hickory	,829	37.65	22.90	,509	26.78	848	32
Horn Beam (Iron Wood)	,720	32.18	19.	,455	23.94	611	25
Hard Maple	,644	28.70	21.43	,431	22.68	617	27
Soft Maple	,597	26.68	20.64	,370	19.47	551	28
White Oak	,855	38.21	21.62	,401	21.10	826	39
Shell Bark White Oak	,775	34.64	21.50	,437	22.99	745	32
Pin Oak	,747	33.39	22.22	,436	22.94	742	32
Red Oak	,728	32.54	22.43	,400	21.05	680	30
Rock Chestnut Oak	,678	30.30	20.86	,436	22.94	632	28
Pitch Pine	,426	19.04	26.76	,298	15.68	510	33
White Pine	,418	18.68	24.35	,293	15.42	455	30
Lombardy Popular	,397	17.74	25.	,245	12.89	444	34

The above is merely an abstract of Mr. Bull's table, comprising the woods in most common use among us. The last column exhibits the relative value of a cord according to the heat which each affords. Thus if hickory is worth one dollar, pig nut hickory is worth ninety-five cents, hard maple sixty cents, white oak eighty-one cents, white pine forty-two, pitch pine forty-three cents, &c.

We will now exhibit, in tabular form, the relative value of coals, by the same standard, merely remarking, that a ton of anthracite coal is considered about equal to a cord of shag bark hickory.

COALS.	Specific gravity of dry coal.	Lbs. of dry coal in one bushel.	Time 10° of heat were maintained in the room by the combustion of one lb. of each article. H.	M.	Value of specific quantities of each article compared with shell-bark hickory as the standard. Ton.
Lehigh Coal	1,494	78.61	13	10	99
Lackawana do.	1,400	73.67	13	10	99
Rhode Island do.	1,438	75.67	9	30	71
Schuylkill do.	1,453	76.46	13	40	103
Susquehanna do.	1,373	72.25	13	10	99
Worcester do.	2,104	110.71	7	50	99
Liverpool do.	1,240	65.25	10	30	250
Richmond do.	1,246	65.56	9	20	205
Hickory Charcoal	,625	32.89	15		166
Maple do.	,431	22.68	15		114
Oak do.	,401	21.10	15		106
Pine do.	,285	15.	15		75
Coke do.	,557	29.31	12	50	126

Mr. Bull's experiments were made in a sheet iron stove, with 42 feet of two inch pipe, having about twenty elbows. A thermometer placed at the termination of this pipe indicated the same temperature as another hung against the wall of the room; which showed that all the heat given off by the combustion of the fuel was retained in the room. On the supposition that 100 lbs. of fuel, consumed in this stove, would maintain a temperature of 60° for 12 hours, he found, that to maintain the like temperature for the same time by other apparatus, the fuel must be increased as follows:

	Cord.	77
In the experiment stove it required	100 lbs.	65
In a short iron cylinder stove, the interior surface covered with clay lute, with nine elbow joints, and 13½ two inch pipe,	105 "	63
In a like stove and pipe, with 3 elbow joints,	122 "	52
In a like stove, with 5 feet of pipe and one elbow,	149 "	58
In a like stove, without clay lute, one elbow, and 5 feet 4 inch pipe, more vertical than the preceding,	222 "	100
In an open Franklin, with one elbow, and 5 feet of 6 inch pipe,	270 "	95
In an open ordinary parlor grate,	555 "	81
In an open chimney fire place,	1000 "	71

It would seem from these experiments, that nine tenths of the heat given off by fuel burnt, in an ordinary fire place, is carried off in the draft, without benefitting the room; that nearly one half is wasted when the fuel is consumed in an open parlor grate; and that lining a stove with fire brick, or clay lute, produces a great economy in fuel.

The Bitter Rot in Apples.

The following paragraph is from the letter of our distinguished correspondent, noticed at page 41:

"A history of the culture of fruit trees since the settlement of this country, is greatly wanted to remove the discouragements that occasionally occur. Some thirty years ago, the *Vandevere*—the queen of culinary apples,—and the *Grey House* that holds the same rank as a cider apple,—were so affected by the Bitter Rot, especially the former, as to render them nearly useless. I have now both varieties, and they have not been for years affected with that disease."

We remember, when the Bitter Rot was so prevalent, to have heard the cause ascribed to the decline of the *variety* by Old Age, a doctrine to which we have seen no good reasons for subscribing. We have been long satisfied that cultivators, speaking of them as a body, but of course, admitting of many exceptions, *have too much theory* and too little observation. The facts which we have just presented to our readers must either prove an erroneous ascription, or that Old Age is not an incurable disease; and we think there need not be much hesitation in deciding this point.

We have lately seen it stated that liming the land is a preventive of the Bitter Rot; but to what extent, or with how much precision, the experiments were conducted, we have not been able to learn. We know that our esteemed correspondent considers lime as indispensable in his system of manuring; but we know not if it has been applied to his orchards; and we would now respectfully make the inquiry of him, with a view to its influence on the fruit.

Notes on Farming.

Breeding.—A cross of a merino buck, with a Leicester ewe, says Sinclair, in the course of four or five generations, will produce fleeces rivaling in fineness Spanish fleeces. This is on the principle laid down by Cline and other breeders, that the male gives a character to the exterior of the offspring.

Fallows, are not known in the maize districts of France. In the plains of the Garonne, the rotation is maize, wheat and turneps and vetches. In Germany the rotation is maize, wheat and turneps.—*Enc. art. France.*

Maize (Indian corn) is often sown for soiling (cut green for stock) either in May, and cut when coming into ear,—or as an after crop, to be fed in the fall.—*Ib.*

Lucern is extensively cultivated in France: Sown broadcast without grain, except occasionally with oats. Cut three times, and when irrigated, five times. Average product five tons the acre. Duration 8, 12, 16, and sometimes 30 years.

Fermentation.—Vinous fermentation is best promoted by a temperature of 50 to 70 deg. The acetous goes on under a temperature of 70 to 75 deg. These facts afford hints to farmers in the manufacture of cider and vinegar; and suggest the propriety of not exposing fresh made cider to a high temperature, and of keeping it in a cool cellar in summer. The acetous fermentation will not take place, even under a high temperature, if air is perfectly excluded from the liquor. It is the oxygen of the atmosphere that, under the proper temperature, converts cider, wine, &c. to vinegar

Rolling wheat, in spring, often bruises the first

and second joints, and produces new lateral shoots; and by browsing the viviparous, promotes the maturity of the oviparous shoots.—*Darwin.*

Gypsum.—G. W. in the American Farmer, says he doubles his maize crop, by putting into each hill, after the maize is dropped, a clam shell full of two parts of leached ashes and one of plaster. Both leached ashes and gypsum operate differently upon different soils.

Mortar.—Prof. Olmsted took one part fresh slaked and good lime, and nine parts clean sharp sand, made them into mortar, and immediately threw it into a pit three feet deep, and covered the pit with boards. After three months it was laid; and in fifteen months after it was harder than mortar with one sixth or one seventh lime, made in the usual way. For good mortar the lime should slack quick and fine, and be immediately mixed—the sand clean and sharp—well worked, and lay three months. Proportion 1 of lime to 4 of sand. The Romans, by law, declared, that no mortar should be used till three years old.—*American Farmer.*

For the Genesee Farmer.

Barrenness in Grape Vines.

An acquaintance in Dansville this last summer showed me in his garden a young thrifty grape vine, of a foreign variety, which he said he took from a bearing vine in the neighborhood, and which, though it had blossomed for several seasons, had never produced any fruit. He inquired the cause of its barrenness, and how to remedy it. I examined the flowers, (as the vine was then in full bloom) and found they were all *staminate* or male flowers. Another similar instance there is of a vine in Bath, originally brought from the Swiss settlement in Vevay, Indiana. It regularly blossoms, but produces no fruit. How shall we account for this variation? and what will restore such vines to fruitfulness?

I am aware that there are some varieties of the American grape which are *Dioecious*, producing *staminate* flowers on one plant, and *pistilate* on another, (*quere*, pistilate, or hermaphrodite?) But I was not aware that a bearing vine was subject to this distinction; or that cuttings or offsets from it in any case would produce barren or staminate flowers alone.

These vines grew in a rich garden soil, and were very luxuriant. Is their barrenness to be attributed to this? If it is, I would suggest as a remedy, to transplant them into a poorer soil, where they will have a more scanty supply of nutriment and moisture, or to cut away a portion of their roots, which will produce the same effect. If any thing will bring them to bear, this will; for, by a known law of vegetable physiology, when the supply of nutriment is shortened, or any change takes place in the plant threatening premature decay, nature hastens to accomplish the end of its being, the continuation of the species, by the production of seed or fruit.

Hammond's Port, Jan. 18. W. W. B.

For the Genesee Farmer.

Chess.

The case related by "A Scotchman," showing (as he supposes) that wheat turned to chess, affords no kind of proof whatever of any such a change. Similar cases have been so often explained in the Genesee Farmer however, that to discuss the subject *again* would be a waste of words; so I shall say nothing more at present, except to inform him that *offering to bet* will not pass for an argument in this country.

An American.

For the Genesee Farmer.

The Food of Plants.

I suspect, though I do not venture so to assert, that "An Observer," in your second No. vol. 4, is wrong in supposing, that plants derive most of their carbon from the atmosphere. Minerals, of themselves, cannot impart fertility. They cannot be decomposed by any known process. The western prairies must contain organic matter, or they would be as barren as the sands of Sahara. The herbage with which they are covered, and whose roots form a perfect matting upon the surface, prove it; and what are this herbage and its roots, which are buried for the corn crop, but carbonaceous matter? The supply of carbon for the young generation of plants, is always afforded, in one way or another, by that which is decaying. The quantity of carbonic acid gas in the atmosphere is about the same at all times and in all places; and if it would suffice for a crop of corn on the western prairies, it would sustain, equally well, a crop of corn upon the Hempstead sands—for these, like the prairies, are black, or blackish. E.

For the Genesee Farmer.

Straw Cutting Machine.

Mr. Tucker—In answer to the inquiry of your correspondent, whether a *straw cutter* can be attached to the horse power of a threshing machine, and in what manner, to give the required velocity, I can state as follows:

The portable power of which this paper contains a cut and description, can be easily modified so as to answer the purpose perfectly, by lifting the top plate and removing the band wheel, and attaching a pulley of the same size by a hook and screw to the arms of the third wheel, and passing the same band over it, as is used for threshing, and applying it to another pulley on the shaft of the straw cutter, would give the required motion, and so diminish the power as to fetch it within the ability of one horse to perform with ease, and great expedition. The kind of straw cutter I would recommend, is Stafford's Patent. It has been in use about ten years, and is decidedly the best in use; it is cheap, simple, and easily kept in repair, and performs its operations with certainty and rapidity.

Both of the above machines are made in this village, and would no doubt be furnished by either of the manufacturers. I have often admired that they were not thus used, but more that straw cutters were not hardly used at all in this wheat growing country. L.

Culture of Turneps.

E. Hersy Derby, Esq., the successful candidate for the Premium of the Mass. Ag. Society on Turneps, gave the committee the following particulars, which were duly authenticated:

The Committee on Vegetable Crops:

Gentlemen—I wish to be considered an applicant for the premium offered by the Society for the best crop of turneps. My crop was raised this season as follows:—The piece of land contains, as per the certificate of the surveyor, two acres one quarter and seven poles, sloping a little towards the south; the upper part of the piece is a light gravelly soil, the lower part of the same a good rich loam. The crop taken from it in 1832 was Indian corn, potatoes and winter squashes, with a common allowance of manure. Late this spring it was ploughed and harrowed and allowed to remain in that state till we had finished our English haying. About the 20th July, we carted on to each acre, and spread as evenly as possible, about ten ox cart loads of old manure left of the preceding year, each load drawn by a single yoke of oxen. The land was then ploughed and harrowed, which covered the manure and the growth of weeds. The seed was sown on the 26th or 27th of July by a drill barrow moved by a man walking at a quick pace in rows about two and a half feet apart. The seed was raised the present season by myself; the quantity sown on the whole piece did not exceed one and three quarter pounds, and was covered by passing the ox roller over the ground. There was a slight shower the morning we commenced sowing the seed, which gave the crop a fine start; and although my other crops suffered severely by the great drouth we experienced about that time, the turneps did not appear to suffer in the least. As soon as they were in the rough leaf we passed between the rows with a light scarifier drawn by a horse, to loosen the ground and destroy the weeds. About a week or ten days afterwards the men went through them, thinned them out to single plants, and cut up what weeds they found with their hoes. Nothing more was done till we commenced taking them up on the 7th Nov.; between that day and the 23d we carted to the barns as follows: Thirty ox cartloads topped in the field, and twelve and a quarter loads untopped. The men were directed to have every load of the topped ones filled as nearly alike as possible; one of them was sent to the public scales and weighed, as per the certificate of the weigher, 2525 lbs. nett, which makes the thirty loads to weigh 75,750 lbs.; or at 56 lbs. the bushel, as per the rule established by the Society, gives 1352¼ bushels. On the 23d, thinking it imprudent to risk the remainder of them any longer in the field, I directed the men to pull all that were then in the field, and cart them with their tops to the barn, on which day we carted twelve and one quarter ox cart loads, each one of which was filled as full as could be piled on. Topping these, and carefully measuring each load, they were found to measure 377½ bushels, which added to the others gives for the whole crop 1730¼ bushels. I expect to consume these turneps in feeding the different kinds of live stock on my farm the ensuing winter.

I am, gentlemen, with great respect,
Yours, &c. E. HERSY DERBY.

Errata.—Page 42, column 1, line 43, for *over* read *even*—p. 45, col. 3, l. 21 from bottom, for *these* read *there*—p. 48, col. 1, l. 2, for *Lindley* read *Lindsley.*

Foddering Cattle.—It is important to make the most of your materials for foddering. Corn butts and straw, which are often thrown away, with a little pains may be made useful as fodder, by being cut with a straw cutter, mixed with a little cut hay or corn, and the mixture sprinkled with a pretty strong solution of salt and water. "There is a remarkable difference," according to Lisle, an English writer on husbandry, "in cattle's eating straw when fresh thrashed, and when it has been thrashed several days, especially if the straw is indifferent fodder."—*N. E. Far.*

The N. Orleans Bee says, by a late letter news has been received of the assassination of Capt. B. Hall, at Bogota, for attempting to bribe the officer of a garrison to deliver it up in the absence of his commander, who had gone to Guayaquil to quell an insurrection.

The shock of an earthquake was felt at Lancaster, Pa. on the 5th inst. The shock was accompanied with a noise similar to that of a powerful explosion, and was preceded by a rumbling noise and perceptible tremor.

For the Genesee Farmer.

Fence Posts.

In a late number of the Farmer, I recommended the cultivation of the Locust, believing it to be the most valuable timber for fence posts. Since I penned that article, I have reflected much on the subject, and have been led to the conclusion, that by the use of strong alkalies, several kinds of timber abounding in our country may be rendered durable in the ground.

An intelligent farmer of Cayuga county informed me, that when he entered on his farm, about thirty years ago, there stood on it a building which had been used as a potashery, and against which lay a large quantity of leached ashes. On removing it, within a few years, he found that one of the posts, on the side next the ashes, was of *basswood*, and (to use his own expression) as sound as when put in.

In building our fine packet ships, the spaces between the timber and ceiling and outer plank, are filled with salt, it having been ascertained that it has the effect to render the wood imperishable. In an article, page 91 of 1st vol. of the Farmer, it is stated that "the Shakers at Union Village have been in the habit of making oak posts as durable as locust, by a very simple and easy process. This is merely to bore a hole in that part of the post, which will be just at the surface of the earth, with such a slope as will carry it just below the surface, and fill it with salt."

With the exception of the red cedar, which is found on the islands and shores of our lakes, we have no timber that will remain sound in the ground many years, unless measures are taken to neutralize the acid contained in the wood, in the part buried in the earth. It appears, by the above statements, that the lye of wood ashes, and salt, have that effect; and we have reason to believe that lime would answer the same purpose. But which will answer best, can only be ascertained by experiment. Query—Does not the lye, salt and lime, drive out and occupy the place of the natural moisture? I believe it to be a fact well established, that seasoned posts are more durable than green ones, and I conclude the reason is, that there is much less of the acid remaining.

I will now propose to the readers of the Farmer, that those of us who have leisure and opportunity, should make the following experiment: Procure sound oak, chestnut, or white cedar posts, and when they are well seasoned, divide them into three parts. Of that part to be put in the ground, let one third be immersed in strong lie, one third in a strong brine, and one third in lime water, for a sufficient length of time to neutralize the acid. Or, if this be attended with too much trouble, set one third with leached ashes to within six inches of the surface, then strong ashes—let one third have salt applied, as done by the Shakers, and the other third be set with lime from the surface to the depth of six inches, for it is at the surface of the ground that posts decay. By such an experiment, in addition to the benefit to ourselves, we should have the pleasing reflection that we have rendered one to the country at large.

I should be sorry if the above suggestions should divert the attention of any of our farmers from the cultivation of the locust, my only object in penning this being to inform them how to supply themselves with durable posts until their locusts shall have attained a proper size.

Several writers for the Farmer have asserted, that posts last much longer if the end which was upwards when growing be put in the ground. I consider this worthy of further experiment.

ONTARIO.

For the Genesee Farmer.

The Cultivation of Indian Corn.

MESSRS. EDITORS—Although Indian Corn is the most important crop with which we occupy our land, it is the very one which receives the poorest management. Not a season passes which does not afford me frequent opportunity for observing the inexcusably negligent manner in which farmers cultivate their corn. They (a majority of them) begin wrong, continue wrong, and as a matter of course, end wrong. In other words, they do not plough well, plant well, nor hoe well, and under such circumstances, how can it be expected that they will receive a large crop? It is too often the case that farmers entertain the idea that any person is competent to plough who is large and stout enough to hold on to the handles of a plough; hence the mistaken, yet frequent practice, of setting boys and stupid, careless men to plough a rugged field to receive a crop of corn. There is scarcely a principle in the whole routine of farming operations, more directly opposed to the interests of the farmer, than that it is not necessary to perform this operation in the best manner possible. There is another idea too common among farmers, and which is almost or quite as fatal as the former, viz: that any one who is stout enough to lift a hoe, is qualified to plant corn; and a third notion, which caps the climax of error, is, that if the ground is so managed as to keep the weeds from actually hiding the corn, it is sufficient. Such mistaken, inconsistent and delusive ideas are cherished by hundreds and thousands of our farmers. It is this system of slack management, running through their whole plan of operations, which keeps so many farmers poor. *Thorough work* is the best motto for the farmer. Thus much by way of preliminary, and now for my own practice. I do not, however, enter upon a detail of my own plan of operations with the idea that it is better than all others, but simply with the honest motive that there are some who will find hints contained in it which will benefit them.

My first step towards raising a crop of corn is, to remove from my field all obstacles to the plough, by which I am enabled to make, with a certain prospect of success, my second step, viz:

Ploughing—which I perform with a good stout yoke of oxen, and a well shaped cast iron plough. The management of the plough I do not entrust to others when circumstances will allow of *my* attending to it myself—for I find that I cannot hire my ploughing done so well as I can do it myself, and in performing the operation, I spare no pains, nor time, to do it as well as it can be done. I make it a point to have every *inch* of sod inverted, and if from any circumstance this cannot be done with the plough, I immediately stop my team and do it with my hands. Don't start at this, brother farmer! but remember that it is not *possible* for you to have your ground too well ploughed for any crop. If you cannot plough but a little in a day, plough that little well, for it is quicker and easier to plough than to hoe.

Rolling.—This I do with a roller 6 feet long by 20 or 24 inches thick, made of solid white oak timber. By going over the ground with a roller as heavy as such an one necessarily must be, in the same direction as that in which it was ploughed, it is put in a fine state of preparation for the next and very important operation of

Harrowing—which I perform with a heavy four-square (as it is commonly called) harrow, containing twenty slender, sharp iron teeth, steel pointed. I make it a rule to harrow until my ground is *very* mellow, without any regard to the length of time which may be required in order to accomplish this object.

Marking out—I do with four chains, fastened by one end on a pole, three feet apart, which pole is supported and drawn by two men (one at each end) across the field in a different direction from that which was last taken with the harrow.

Planting.—Before planting my corn, I wet it with soap and then roll it in plaster. I obtain the most careful men I can find for assisting me in planting—make it my rule to put my seed on mellow earth, all lumps being kept out of the way, and none being drawn over the seed, which I cover lightly with fine earth.

First Hoeing.—As a preparation for this important operation, I enter the field with my cultivator, passing it through the corn twice in a place, both ways. This leaves the ground very mellow, and in excellent condition for hoeing. I suffer no weeds to be buried in the hill, but have them all carefully pulled out. If the earth about the plants is baked, I have it displaced, and substitute that which is mellow.

Second Hoeing.—It is common among farmers, even those who have a cultivator, and every farmer should have one, to use a plough to prepare their ground for a second hoeing. I have done so myself until the last year. I had two fields planted with corn. I prepared one of them for the second hoeing with the plough. When about to enter the other, I thought of trying the cultivator,* doubting, however, whether the experiment would be a successful one, for the corn was then two feet or more high. But, after some hesitation, I hitched my horse to my cultivator and went at it, and more complete, satisfactory success I could not have wished for. There was less corn broken down than would have been with the plough, and the sod was left entirely unbroken,—the ground as mellow as a garden bed. In my second hoeing I leave the ground as level as possible, taking care not to make a hill about the plants, so that their roots may be left to shoot along horizontally near the surface of the earth, and get to themselves the heat of the sun as soon and direct as possible.

Harvesting.—This I do by cutting up at the root as soon as the corn is glazed—make a bundle containing eight hills, and a stook containing eight bundles, bound very tight around the top with but one band.

After planting, and before the corn comes out of the ground, I strew over the ground about half a bushel of corn to every three acres, or a bushel to six. The birds will pick up this corn, and not meddle with that which is growing. If the birds are numerous and hungry it may be necessary to sow the field a second time. The year before

* I wish those who have never tried the cultivator for the second hoeing would do so. I have no doubt of their success.

last I suffered very much from having the birds pull my corn; last year I tried the experiment of sowing corn over my field, and had not a single plant pulled up afterward. It is cheaper to give the birds a bushel of corn, than to have them pull up what would produce 25 or 50 bushels, which they often do, and have done for me. I have found no scarecrow so effectual for the protection of young corn, as to feed the birds with as much as they will eat.

I plaster my corn after the first hoeing.

I came near forgetting one thing, viz: the amount of seed used. Last season I followed Judge Buel's advice, and put into each hill from six to eight kernels.* At the first hoeing I sent one person ahead to pull out all the plants but the four healthiest ones in each hill. The consequence was, that throughout my field there was rarely a hill which had not its four stout stalks. I would strongly recommend this plan to others.

And now, Messrs. Editors, I have made out a long story about raising corn. Whether it is worth publishing, you must judge.

Respectfully, &c. W. P. W.

Milton, Saratoga co., Feb. 1, 1834.

For the Genesee Farmer.

Culture of Melons.

In the Genesee Farmer of the 18th ult., there is a communication from W. W. B., stating his want of success in the cultivation of melons. Perhaps I may be able to suggest a plan by which he will not be liable to such a total failure in future, though I should suppose that in your latitude there was not much certainty in bringing this delicious fruit to perfection. I would recommend him to select the lightest spot of ground in his garden, and at suitable distances, say eight feet apart, dig holes about thirty inches square and eighteen inches deep. In these holes put some well rotted manure, which must be well mixed with the *soil*, until they are nearly full. The soil should be entirely clean of grass or grass roots, and completely pulverized. A sufficient quantity of the same kind of earth should then be thrown on to raise a hill to a moderate hight above the general surface of the ground. If these directions are followed, and the sub-soil be not of such a tenacious quality as to retain much moisture, I think a fair crop may be reasonably calculated upon. An additional advantage would be derived from digging the holes in autumn, and letting the earth thrown out remain until spring to be ameliorated by the frost. This is the mode pursued by some of the gardeners who supply the Richmond market with melons, and I have found it to succeed better than any other I have tried. I will, however, mention an experiment I made last year, the result of which was favorable beyond my expectations. I raised a few plants both of the watermelon and the cantaleupe in a box, which came up very early among other plants. I transplanted them into a rich, well prepared spot of ground, that had been spaded very deep, being careful to take them up with as much dirt round the roots, and with as little injury to the fibers as possible. They grew well, were not infested by bugs, being too large to be much annoyed by them —and yielded a remarkably fine crop, both as to number, size and quality. If this operation is performed well, and the young plants kept moderately watered if the weather is dry, I incline to the opinion that this will be found to be a very eligible way of raising the melon. By this means we may also have the plants in readiness to set out so as to be greatly in advance of those planted in the open ground; for the earlier they get a start the more certain will be the crop. The seeds may be planted at once, and the transplanting done as soon as the danger from late frosts is over. T. S. P.

Bearerdam, (Va.,) 2 mo. 3, 1834.

[* Gen. Far. vol. 3, p. 29.]

For the Genesee Farmer.

Cattle--No. II.

It is hardly worth while for our present purpose, to trace the ox from its original location in western Asia, to its naturalization on the soil of England; nor to extend our researches back to the time of Julius Cæsar's invasion, simply to learn the fact that cattle then existed upon the several islands of Great Britain.

History furnishes no information on the subject, farther than the fact that various breeds of cattle, differing in form and color, have been reared in every part of the United Kingdom, from time immemorial, and that these cattle in their various modifications have been transmitted from one generation to another, to the present time. Within the last one hundred years, great researches have been made, and innumerable controversies have arisen in relation to the *original stock* of these various breeds, and though superior talent and extensive learning have been arrayed in the discussion, no satisfactory information has been elicited. The most that could be done was to classify the different breeds as they were found to exist in the different sections of the country, and to investigate, so far as practicable, their structure, habits and qualities.

It was soon found that one of the most distinguishing marks of the various breeds, was the length or shortness of the horns, and from thence arose a classification, having reference to great and important peculiarities, but distinguishable principally by the length of their horns. In some sections of the country, long and singularly shaped horns were the prevailing characteristics of *all* their cattle, though differing essentially in other particulars; while other localities were characterized by shorter and different shaped horns, gradually changing and diminishing according to circumstances and climate, to an entire *hornless* animal.

These different breeds were therefore arranged by most writers into the following classes: *Long Horns, Middle Horns, Short Horns, Crumpled Horns*, and the *Hornless* or polled breed.

The *Long Horns* were found to exist extensively throughout Ireland, and occasionally in the midland counties of England, but more particularly in Lancashire, and the west riding of Yorkshire. This is the breed which was so much improved by Mr. Bakewell of Dishley, in Leicestershire, and so far as England was concerned, seemed to originate in Lancashire or Craven. This breed, improved by Bakewell, is now more generally known as the "Dishley Breed," from the name of the town where Mr. Bakewell resided.

The *Middle Horns*, supposed to be a distinct breed, and not derived from a mixture of either of the others, were extended more or less throughout England, Wales, Scotland and Ireland, but were found in greatest perfection and beauty in Devonshire, Herefordshire, Gloucestershire, and the lowlands of Wales. In all these sections of country, the distinguishing characteristic of *Middle Horns* was clearly preserved, though varying in size and quality according to climate and cultivation. In Devonshire, however, the breed seemed *naturally* to have obtained a higher excellence than elsewhere, and from the *improvement* of the breed as there found, has sprung the "*Improved Devons*," as now known.

The *Short Horns* were first noticed in the eastern part of Yorkshire and the other northern counties, and are supposed to be either an accidental variety, or originally introduced from Holland or Denmark. Whichever may have been the fact, it is certain they have no claim to being distinguished as the *native stock*. Originally they were not held in much estimation, and it was not until after their cross with the Dutch cattle, in the vicinity of Durham, and along the banks of the river Tees, that they gained any celebrity. Their rapid improvement, however, in these localities, soon gave them the distinctive appellation of "*Teeswater*" and "*Durham Short Horns*," and their approved excellence has more recently extended them throughout every part of the United Kingdom, and in a measure throughout the world.

The *Crumpled Horns*, or *Alderney*, as they are more generally called, is evidently an accidental variety, and found principally in small numbers along the southern coast of England, though they are highly esteemed by *gentlemen breeders*, not only in England but in this country.

Polled or *hornless* cattle have existed from a very early period, in the lowlands of Scotland, and the northern counties of England. They have therefore a much better claim to originality than the Short Horns, though it seems to be the opinion of most writers, that they were also an accidental variety. Their history is traced to the remotest period of Scotch tradition, and from all the information which can now be obtained, there is no certainty in relation to their origin. The extinct kingdom or province of Galloway, however, *seems* to be the native district of this breed of cattle, and it is there that we now find them in their greatest purity. But as we shall have occasion hereafter to examine more in detail the history and peculiarity of this as well as the other breeds, I will defer a farther description for the present.

The great controversy in regard to the original breed of British cattle, has been between the *Long* and the *Middle Horns*. The other varieties are generally admitted to be either foreign or accidental, so that the entire power of argument and illustration has been exhausted upon these two breeds. The discussion of this subject seems to have elicited more talent and research than it really deserved, for it can be a matter of very little importance to any class of the present generation, whether the claims of one breed or the other to originality were established. From a variety of circumstances, however, the preponderance of evidence seems to be in favor of the *Middle Horns* having been the original native breed. But it is hardly worth our while to enter into an investigation of this matter, especially as so little of interest or profit is to be gained by it. We will therefore dismiss this part of the subject, and

proceed to the more interesting examination of the different breeds, in reference to their qualities, peculiarities, and improvement.

This will embrace a wide field, and as the distinctive qualities of each breed, with its various modifications, will probably pass in review before us, it is desirable before entering upon the discussion, to have a distinct idea of what constitutes *excellence* in cattle. There are certain qualifications which are universally admitted to be essential to the character of a perfect animal. In the ox, elegance and symmetry of figure; an early maturity or propensity to fatten; docility and speed in labor; a small consumption of food; and when slaughtered,a small proportion of offal compared with the marketable parts. In the cow, all these different qualities must exist, with the addition of superiority as milkers. But these are vague characteristics, and to arrive at a better understanding of the particular points, which establish these excellencies, I will describe them more in detail:

"If there is one part of the frame, the form of which, more than any other, renders the animal valuable, it is the chest. There must be room enough for the heart to beat and the lungs to play, or sufficient blood for the purposes of nutriment will not be circulated. We look, therefore, first of all, to the wide and deep girth about the heart and lungs. We must have both, for the grazier must have width as well as depth. And not only about the heart and lungs, but over the whole of the ribs must we have both length and roundness; the *hooped* as well as the deeep barrel is essential; there must be room for the capacious paunch, and room for the materials from which blood is to be provided. The beast should also be ribed home; there should be little space between the ribs and the hips. This seems to be indispensable in the ox, as it regards a healthy constitution and a propensity to fatten; but a largeness and drooping of the belly is excusable in the cow, as it leaves room for the udder; and if it is also accompanied by swelling milk veins, it generally indicates her value in the dairy.

"This roundness and depth of the barrel, however, is most advantageous in proportion as it is found behind the point of the elbow, more than between the shoulders and legs; or low down between the legs, rather than upwards towards the withers; for it diminishes the heaviness before, and the comparative bulk of coarser parts of the animal, which is always a great consideration.

"The loins should be wide, and should extend far along the back, and the flanks should be round and deep. The hips should be large and round rather than wide, and presenting when handled plenty of muscle and fat. The thighs should be full and long, close together when viewed from behind, and the further down they continue so, the better. The legs short, for there is an almost inseparable connection between length of leg and lightness of carcase, and shortness of leg and propensity to fatten. The bones of the legs should be small, but not too small.

"Last of all, the hide,—the most important thing of all—thin, but not so thin as to indicate that the animal can endure no hardship; moveable, but not too loose, and particularly well covered with fine and soft hair."

This is but a concise sketch of the desirable points of a fine animal, but it will be readily perceived that the breed which will most nearly combine and perpetuate these essential requisites, may be well considered the most valuable.

With these preliminaries, I shall in my next number, enter upon the history, peculiarities, and improvement of the "Long Horns."

QUERCUS.

NOTE.—Though the extract given above has appeared in the Farmer since the receipt of Q.'s communication, we have thought it better to re-publish it than to make a break in the series.—*Editor*.

For the Genesee Farmer.

How to make the most of a little land.

In the spring of 1830, I purchased in this city a house and lot; the lot was fifty by one hundred and twenty feet. One third of the lot was covered by the building. When I purchased, there was not a tree, shrub or plant on the premises, notwithstanding the house had been constantly occupied for near forty years. I planted the first tree in the spring of 1831. I at that time planted three peach and three gage trees. One of the peach and the three gage trees bore fruit the past season. I have since added three more peach, four choice plum, one choice cherry, one quince, and four choice pear trees, which bid fair to bear fruit soon. I have also three fine grape vines, that will probably bear plentifully next season, judging from their size. I have also about a dozen smaller vines. I raised on the same ground, the past season, cucumbers, beets, sallad, citron melons, and nasturtiums, in great abundance for family use and for pickling. I also had a great abundance of cabbage, both for summer and winter use. In addition to the above, I have at least fifty flowering shrubs and bushes, such as Roses, Syringoes, Altheas, Lilacs, Snowballs, Rose Acacias, Flowering Almonds, Cape Jasmines, &c. &c. with a plenty of the Honey Suckle. I have at least two thousand bulbous roots, such as Hyacinths, Tulips, Crocuses, Narcissus, &c. with equal that number of annual and biennial plants and flowers, and all of the afore mentioned luxuries and necessaries, are enjoyed from the spot of ground that has laid waste for so great a length of time. There is still another item of profit to be added to the foregoing list: nine tenths of the labor of cultivation has been performed with my own hands, morning and evening, when not engaged in my regular business, unquestionably affording me a greater degree of health, and certainly a far greater degree of pleasure, than I should otherwise have enjoyed. I have also a lot in the rear of the above mentioned twenty-five by one hundred and twenty feet, on which there is a barn, cow shed, and pig stye, covering forty by twenty-five feet, leaving eighty by twenty-five feet for cultivation. Around this I have a border of two feet wide, one fourth of which is occupied by currant bushes, one fourth by raspberry, one fourth as an asparagus bed, and one fourth for spinnage, for a cabbage plant bed, for early lettuce, &c. The center is laid out in three squares of seventeen by twenty-three feet. The first square I plant with early potatoes, the second with Lima beans, and the third with sweet corn; of the two latter, I have a great supply for my family, and some for my neighbors. Potatoes we have of the finest kind and in great abundance through the summer season. Last fall we put about four bushels in the cellar from the same patch. We were in the summer nine in family, in the winter eight. The edge of my border I planted with bush beans; and I do not recollect that I paid a single cent for vegetables, except for the articles of green peas, and for a few carrots and parsneps, the latter two of which I did not have of my own in consequence of sowing bad seed. I give you the above statement of facts, with the hope that if you should think them worth publishing, some one person may be induced to try the experiment, when he will learn that it will not only afford him a source of profit, but one of great pleasure, to grow his own vegetables; and that, while by beautifying his yard he is not only adding to his health and comforts, but in most cases, adding very much to the value of his property. M.

Hudson, Feb. 7, 1834.

For the Genesee Farmer.

Bees.

I have been rather surprised that none of the correspondents of the Farmer have had any thing to say lately on the subject of bees.

In a communication from the indefatigable Ulmus, in No. 27, vol. 3, he says: "I hope those who have commenced their cultivation will carefully note their observations, so that next winter we may come together and compare notes, and really see whether we do know any thing of the subject."

The design of this communication is to elicit remarks from others more successful than myself, that light may be thrown on this interesting subject

I commenced with two hives just a year ago, being totally ignorant about bees, as well as all my family. As the hives were very full of bees and honey, I have reason to think we lost a swarm from each; however, we saved two late swarms, one very large, the other small. They did well, and all seemed to go on well till fall. The old hives were crammed full of comb, honey and bees; but in a few days the bees became quite still, and on examining the hives, I found every bee was gone, and a good deal of honey also missing. I suppose it was taken away by other bees, which had fought and conquered mine; but I saw nothing to induce me to think that there was any fighting going on. How it happened that the two new hives were not attacked and robbed, being close by, and how it was that so much honey was left in the old ones, I cannot tell, as there was about forty pounds of honey in each, besides dry comb.

The bees in my two new hives being now lively and well, I wish to place them in such a situation as shall if possible defend them from the attacks of other bees, and by giving them room, obviate the necessity of their swarming.

I am rather undecided whether to adopt the long box of Ulmus, put a hive on the top and make the bees work down into the new box, or to build a small house, say six feet square, and put a hive into it, and let the bees as they increase fill the whole. The objection I see to the latter mode is, that the bees would build their comb on the door, to open which would make great havoc.

The plan of putting bees in a garret also seems to have advantages, but I see a difficulty; I have an idea that the heat of an unceiled garret will be so great on some certain days in summer, that the comb will be melted in some degree.

I have written more than I intended when I began, and am afraid that the history of my misfortune with my bees, cannot be interesting to any reader, but if it induces others to use their pens on the subject, good may come out of it.

In conclusion I may just say, that when more at leisure, I intend to send a short piece for insertion in the Farmer, stating what I know about raising turneps, mangel wurtzel,&c. All our agricultural knowledge ought to be common stock, the Genesee Farmer the medium through which

we distribute it to those who need, and our rich reward the reading of its valuable pages.

Owasco, 2 mo. 10, 1834. J. S.

For the Genesee Farmer.

Highways---No. XVIII.

From the Revised Act of 1828 respecting Highways and Bridges, Title 1, Article 1, Section 5:

"It shall be the duty of the Commissioners of highways of each town, to cause mile boards or stones, to be erected, where not already erected, on the post roads, and such other public roads in their town as they may think proper, at the distance of one mile from each other, with such fair and legible inscriptions as they may think proper."

On several Post Roads which I have had occasion to travel, there are milestones through some towns, and none through others. I pretend not to know the cause of this discrepancy; but it is presumable that different commissioners have construed the law differently. If this should prove to be the case, it is quite time that its phrascology was better understood.

In my apprehension, those who have erected milestones have done NO MORE than the law requires. "It SHALL BE THE DUTY of the commissioners—to cause mileboards or stones—to be erected—on the POST ROADS, and *such other roads* as they may think proper." I cannot perceive that the commissioners in this case, have any discretionary powers, except 1st. to erect *either* milestones or mileboards; 2d. to extend this accommodation to highways that are NOT *post roads*, and 3d. to mark them with "such fair and legible inscriptions as they may think proper." It would be strange language to say "It SHALL BE THE DUTY of the commissioners *to do as they may think* proper;" and very different from that which occurs in other parts of the Act where discretionary powers are given. Take some examples:—"The commissioners of highways SHALL HAVE POWER" to lay out and discontinue roads—"The commissioners of highways MAY direct and empower" any overseer to procure a scraper—"The commissioner of highways MAY put up" a notice at the end of certain bridges. If the Legislature had considered the direction with regard to Post Roads *not peremptory*, the words "where not already erected" would be entirely superfluous.

By way of apology for the commissioners who have omitted this requirement, I would observe however, that in the Act as it is printed in pamphlet form, there is a *comma* immediately after the word "town" in the 5th line, which might seem to leave Post Roads and other roads equally to their discretion; but that it was improperly placed there must be evident from the context.

It is hard to conceive that the Legislature should have had doubts of the propriety of placing milestones or mileboards on all Post Roads. The advantages to travelers are too numerous to leave a question on this point; and another provision of this Act in a case precisely parallel and similar, may be cited in illustration of the meaning and intention of the former Section.

Section 9. "The commissioners of highways of each town, SHALL CAUSE GUIDE POSTS, with proper inscriptions and devices, to be erected at the intersections of all the post roads in their town."

Here remark that this part of the Section is *peremptory:* what follows is discretionary: "and at the intersection of such other roads therein as they may deem necessary." VIATOR.

PRICES CURRENT.

ARTICLES.	PER	Feb. 21. ROCHESTER.	Feb. 17. NEW-YORK.
Ashes—Pot....	100lbs.	$3,25 a 0,00	$4,25 a 4,28
—— Pearl..	.....	3,50 a 4,25	4,60 a 4,65
Beeswax, yellow	lb.	0,16 a 0,18	21 a 22
Candles, mould	.....	0,10 a 0,11	13. a 14
—— dipped.	.....	0,10a0,10½	11 a 12
Cloverseed....	.....	.....	7½.a.8½
Flax, American.	.....	.....	8..a..9
Flax seed, clean	tierce	9,00a10,00	14,88a15,00
Flour, Western.	barrel	4,50 a 5,00	5,31 a5,69
Grain, Wheat..	bushel	0,81 a 0,00	.....
—— Rye....	.....	0,62.....	70.a..72
—— Oats...	.....	0,27.....	36.a..38
—— Corn...	.....	0,46.....	60.a.62½
—— Barley..	.....	0,50.a..56	70.a..71
Hemp, Americ'n	ton	.....	100 a 125
Hops, 1st sort..	lb.	.....	18.a..19
Plaster Paris...	ton	6,00 a 0,00	2,88 a3,00
Beef, Mess....	barrel	0,00 a10,00	8,75 a 9,50
—— Prime....	.....	0,00 a 8,00	5,56 a 5,75
Pork, Mess....	.....	13,00a14,00	13,50a14,75
—— Prime....	.....	11,00	10,25a10,75
—— in the hog.	100lbs.	4,50 a 5,00	.....
Hog's Lard....	.....	8,00 a 9,00	8,00 a 8,50
Tallow.....	.....	7,50 a 8,00	8,75.....
Hay.....	ton	7,00 a 8,00	13,80a15,00
Apples.....	bushel	25.a..50	.....
Potatoes.....	.....	18.a..25	.....
Cheese.....	lb.	6.a...8	7½a....
Butter.....	.....	12..a.14	15.a..17

Reduction in Prices of Trees, &c.

WILLIAM PRINCE & SONS have determined, in consequence of the pecuniary pressure, to reduce the prices of a great variety of Trees and Plants, where orders are sent for a considerable amount, and all persons who desire Fruit and Ornamental Trees, Flowering Shrubs and Plants, Green-House Trees and Plants, splendid Dahlias, or Seeds, will, on applying to them *direct, by mail*, with a list of the articles wanted, be promptly furnished with a printed sheet explaining the reduced rates. The Chinese Mulberry, or Morus multicaulis, are now reduced to $25 per 100, and $4,50 per dozen; Pears, $37,50 per 100, and extra large ditto, 50 cts. each; and 50,000 are 2, 3 and 4 years grafted; Peaches, 20 to $25 per 100; large Orange Quinces, $30 per 100; English and Spanish Filberts, $25 per 100; fine red Raspberries, $6 per 100; large red and yellow Antwerp ditto, $16 per 100; Gooseberries, finest Lancashire varieties, $20 per 100, and large Scotch varieties, $18 per 100; large red, white and black English Currants, $16 per 100; Isabella Grapes, 3 year old vines, $25 per 100, and 2 years ditto, $20 per 100; Catawba, Alexander, Winne, York Claret, York Madeira, and Scuppernong, $25 per 100; Herbemont's Madeira, Troy and Elsingburgh, $30 per 100; Norton's Virginia Seedling, $35 per 100. The collection of choice European Grapes is unrivaled. Chinese Ailanthus, 4 feet high, $4,50 per dozen, and larger sizes in proportion. A reduction is made on a great many kinds of Roses, Pœonies, Chrysanthemums, &c. Double Dahlias, of such fine assorted kinds as have been most increased, will be supplied at 3, 4,50 and $6 per dozen, according to excellence, and selected by ourselves. The roots can be safely sent to any distance. The new varieties of Flemish and English Pears having been early introduced by us and greatly increased, the prices of the greater part have been reduced, and the trees are mostly of fine size and three years ingrafted. The Ornamental Trees and Shrubs of most kinds are large and thrifty, and of double and treble the value of smaller ones, which is a most decided advantage, being a gain of several years in embellishment.

Linnæan Botanic Garden and Nurseries, Flushing, near New York, Feb. 10, 1834. feb22

THE FARMER'S OWN BOOK; OR FAMILY Receipts for the Husbandman and Housewife; being a compilation of the very best receipts on agriculture, gardening and cookery, with rules for keeping Farmer's Accounts.

arf For sale by HOYT, PORTER & Co.

COBB'S MANUAL OF CULTURE OF SILK, &c. for sale by HOYT, PORTER & Co.

Albany Seed Store and Horticultural Repository.

THE subscriber having resumed the charge of the above establishment, is now enabled to furnish traders and others with FRESH GARDEN SEEDS, upon very favorable terms, and of the growth of 1833, *warranted* of the best quality.

The greatest care and attention has been bestowed upon the growing and saving of Seeds, and none will be sold at this establishment excepting those raised expressly for it, and by experienced seedsmen; and those kinds imported which cannot be raised to perfection in this country; these are from the best houses in Europe, and may be relied upon as genuine.

It is earnestly requested whenever there are any failures hereafter, they shonld be represented to the subscriber; not that it is possible to obviate unfavorable seasons and circumstances, but that satisfaction may be rendered, and perfection approximated.

Orders will be punctually attended to, and carefully packed and forwarded as directed. But as the collection of distant debts is often troublesome, and sometimes impracticable, it is desired that satisfactory references may be made to persons in *Albany*, when the order is not accompanied with the money.

Also, French Lucern, White Dutch Clover, White Mulberry Seed, genuine Mangel Wurzel, Yellow Locust, Ruta Baga, and Field Turnep Seeds, well worth the attention of *Farmers*.

W. THORBURN,
347 N. Market-st. (opposite Post Office.)

☞ Catalogues may be had at the Store; if sent for by mail, will be forwarded gratis: *orders* solicited early, as better justice can be done in the execution.

Albany, Jan. 21, 1834. feb1-f4tr1talt

Valuable Sheep for Sale.

THE subscriber haying more SHEEP than he wishes to keep through the summer, will on or before the first of June next, sell about eighty of his fine wooled Ewes with their lambs. Farmers wishing to commence or increase their flock of sheep, will seldom meet with as profitable a lot of Ewes. The greater part of them have been raised from rams from the flock of the Hon. R. S. Rose, and the lambs to be sold with them are from rams selected from the above mentioned flock, which for quality of wool, is not excelled in the United Sates. The subscriber has also 135 three and four year old Wethers of the first quality, which he will sell about the same time. JOHN JOHNSON.

Fayette, Seneca County, Feb. 7, 1833. feb8-f3m

Durham Cattle for Sale.

A FEW choice animals of the pure "Improved Durham Short Horn" breed, consisting of *Bulls, Cows, Heifers* and *Calves*, may be obtained of the subscriber, if applied for soon.

CALEB N. BEMENT.

Albany, Feb. 1, 1834. feb 1-f4t

For Sale,

A LEVELING INSTRUMENT or spirit level, with a tripod—price 75 dollars. Apply to DAVID THOMAS,

Jan. 10, 1834. near Aurora in Cayuga county.

MONROE GARDEN AND NURSERY,

GREECE, NEAR ROCHESTER, N. Y.

THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots Nectarines, Quinces, Currants, Gooseberries Raspberries, Strawberries, Ornamental Trees Shrubs, Plants, Hardy Roses. Vines, Creepers, Herbaceous, Perennial Plants, Bulbous Roots, &c.

Also, a few hundred of the Morus Multicaulis or Phillipine Mulberry, the white Italian Mulberry by the hundred or thousand, English Hawthorn Quicks, Grape Vines of both native and foreign varieties, mostly of large size, for sale by the single vine, hundred or thousand at reduced prices

The subscriber has a large Green House well filled with a large collection of choice Green-House Plants in good condition.

All orders, by mail or otherwise, will be promptly attended to, and packages delivered in Rochester or at the mouth of Genesee River.

ASA ROWE.

Orders for Mr. Rowe's Nursery received by the Publishers of this paper.

Catalogues may be had at the office of the Genesee Farmer—will be sent to those who wish them gratis. October 5, 1833. f6m

Education in Young Tennessee.

From Dr. LINDSLEY'S *Address.*

"Upon the virgin soil of Tennessee, then, may be reared a seminary, which shall eclipse, in grandeur of design and felicity of execution, and in the wisdom of its arrangements and combinations, all other institutions—if her sons will but prove true to themselves and faithful to future generations. A more eligible or healthful site for such an establishment cannot be found in the Western country. *Here* is the place, and *now* is the time for generous enterprise. Here let us erect a university, so decidedly and confesssedly superior in every department, that a rival or competitor need not be feared. Let us make ample provision for every species of instruction—scientific, literary, professional—which our country demands. Let education be extended to the physical and moral, as well as to the mental faculties. Let agriculture, horticulture, civil and military engineering, gymnastics, the liberal and the mechanical arts—whatever may tend to impart vigor, dignity, grace, activity, health, to the body—whatever may tend to purify the heart, improve the morals and manners, discipline the intellect, and to furnish it with copious stores of useful elementary knowledge,—obtain their appropriate place and rank, and receive merited attention in our seminary; so that parents may, with confidence, commit their sons to our care. Assured that they will be in safe and skillful hands—under a government, equitable, paternal, mild, firm, vigilant, and faithful—where their every interest will be consulted, their every faculty be duly cultivated, and where every effort will be made to render them intelligent, virtuous, accomplished citizens. Does any man doubt that such an institution will ever want patronage? Make it the best in the country; and will it not command the patromage of the country? Such an establishment as we contemplate, the public mind is already prepared for, and has begun to call for. This call is imperative—it will be heard—it will be answered. We must meet it or others will."

"The Trustees of Cumberland College have purchased one hundred and twenty acres of land to meet the various purposes of their contemplated university. It is proposed immediately to commence the erection of a series of buildings for the accommodation of students, instructors and stewards; consisting of five additional colleges, each sufficiently commodious for a hundred students and three assistant professors or tutors, and of seven houses for as many principal or head professors. We shall then have six colleges and twenty-five instructors, and accommodations for six hundred pupils. To each college will be attached a refectory or boarding house, with eight or ten acres of land for gardening and exercise. The colleges will be erected at such distances from each other as to prevent the usual evils resulting from the congregation of large numbers of youth at the same place. Professors will occupy houses on the intervening lots; and there will be at least three officers resident within the walls of each college. We shall thus have six distinct and separate families, so far as regards domestic economy, internal police, and social order; while one *Senatus Academicus* will superintend and control the whole."

"Gardens and mechanic's shops will be interspersed among the various edifices, in such manner as to be easily accessible to all the youth for improvement and recreation. Whenever the present ground shall be thus occupied, it will be necessary to procure fifty or a hundred acres more, for a model or experimental farm; that agriculture, the noblest of sciences and the most important of the useful arts, may be thoroughly studied and practiced. At a future period, or as soon as the means can be obtained, other suitable edifices, both useful and ornamental, may be erected. The plan admits of indefinite extension; and in proportion to its enlargement, its advantages will be increased, while the expense of its maintenance will be diminished."

A spoonful of horse radish put into a pan of milk, will preserve it sweet for several days.

Mutuality of Instruction.

Hon. Edward Everett's Address before the Phi Beta Kappa of Yale College, is a scholar-like and able production on the "high Philosophy of education." There are few so ready and classical pens in the country, as Mr. Everett's. In the Address above named, he thus justly and happily speaks of the mutuality of instruction.

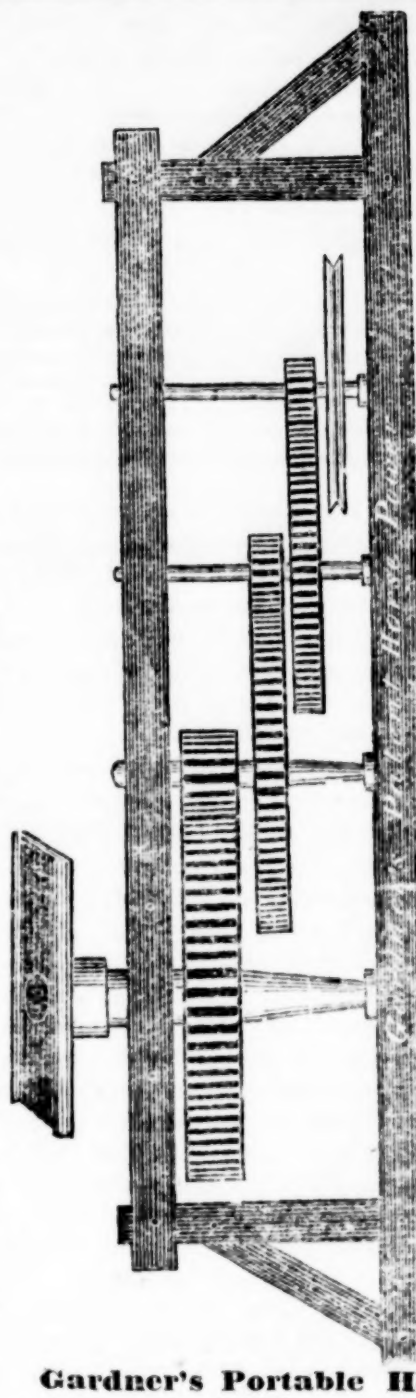
"Man has three teachers, the schoolmaster, himself, his neighbor. The instructions of the two first commence together; and long after the functions of the school-master have been discharged, the duties of the two last go on together; and what they effect is vastly more important than the work of the teacher, if it is estimated by the amount of knowledge self-acquired or caught by the collision or sympathy of other minds, compared with that which is directly imparted by the schoolmaster, in the morning of life. In fact what we learn at school and in college is but the foundation of the great work of self instruction, and mutual instruction, with which the real education of life begins, when what is commonly called the education is finished. The daily intercourse of cultivated minds, the emulous exertions of the fellow votaries of knowledge, controversy, the inspiring sympathy of a curious and intelligent public, are all powerful in putting each individual intellect to the stretch of its capacity. A hint, a proposition, an inquiry, proceeding from one mind, awakens new strains of thought, in a kindred mind surveying the subject from other points of view, and with other habits and resources of illustration; and thus truth is constantly multiplied and propagated, by the mutual action and reaction of the thousands engaged in its pursuits."

The Rose.

BY MRS. L. H. SIGOURNEY.

I saw a rose perfect in beauty; it rested gracefully upon its stalk, and its perfume filled the air. Many stopped to gaze upon it, many bowed to taste its fragrance, and its owner hung over it with delight. I passed it again, and behold it was gone—its stem was leafless—its root had withered; the enclosure which surrounded it was broken down. The spoiler had been there; he saw that many admired it; he knew it was dear to him who planted it, and beside it he had no other plant to love. Yet he snatched it secretly from the hand that cherished it; he wore it on his bosom till it hung its head and faded, and, when he saw that its glory was departed, he flung it rudely away. But it left a thorn in his bosom, and vainly did he attempt to extract it; for now it pierces the spoiler, even in his hour of mirth. And when I saw that no man who had loved the beauty of the rose, gathered again its scattered leaves, or bound up the stalk which the hands of violence had broken, I looked earnestly at the spot where it grew and my soul received instruction.—And I said, let her who is full of beauty and admiration, sitting like a queen of flowers in majesty among the daughters of women, let her watch lest vanity enter her heart, beguiling her to rest proudly upon her own strength; let her remember that she standeth on slippery places, 'and be not high-minded, but fear.'

In one year 65,000,000 of eggs were exported from France to Great Britain.



The above machine is composed of a wood frame work, 4 iron shafts, 3 cogged wheels, 3 pinions, and one band wheel or pulley; around which passes a rope which reaches the threshing machine, and over which the horses travel. The levers for the horses to draw by are bolted to the flaunch or shoe on top of the main shaft.

Gardner's Portable Horse POWER.

IT has for a long period been a great desideratum to discover *a cheap, strong and safe* machine, uniting all the requisites for threshing purposes.

The above cut represents a generating power, comprised within the space of 3 feet by 7—a *plain, simple train of wheels*—multiplied until the required motion is procured, and of a strength equal to the power of six horses.

The great *simplicity, strength,* and *perfect mechanical construction,* secures it against accidents or failure, and its compact and condensed form allows it to be placed where it is wanted to be used, or removed to a place of safety in a very few minutes.

Two horses drive it well; although four horses do the work with greater facility, and more economically.

It is the only machine without objection; when kept well oiled it cannot be put out of order, except it is broken; and with fair usage, it is guaranteed against such a contingency.

It is the most desirable form yet devised to travel the country with, for those who thresh by the bushel.

The application of a different pinion, renders it available for the use of oxen, and for one dollar expense it can be applied to any machine now in use.

It can be transported in a common wagon without preparation or inconvenience; and be sent ready for use to any part of the United States or Canada.

Various forms of *Threshing Machines* can be had with it; all warranted perfect in their operations.

Application may be made to Messrs. ALLCOTT, WATTS & LANGWORTHY, Hardware Merchants; or to the manufacturers and proprietors, first stone building below the Cotton Factory, Brown's Race.

Rochester, January 1, 1834.

N. B. Persons purchasing after the 15th Feb. can have a credit till after next harvest, or a very liberal discount for cash. feb 22